

## SUBSTITUTE SPECIFICATION

### IMPROVEMENTS IN RADIO POSITIONING SYSTEMS

#### ABSTRACT OF THE DISCLOSURE

5

The present invention sets out to overcome the hearability problem in CDMA communications networks in which positioning services are provided, by using a separate sampling device **204, 205, 206** for each transmitter **201, 202, 203**, which sends to the computing device **208** a representation of the signals transmitted only by that transmitter. A cross-correlation of the representation sent back by the mobile terminal **207** with the representation sent back by the sampling device in the brightest transmitter is performed in the computing device **208**, and a blurred estimate of that brightest signal is subtracted from a blurred version of the representation sent back by the mobile terminal **207** in order to reduce its effect on the remaining signals as far as possible. The cross-correlation and subtraction steps are iterated until no useful signals remain to be extracted.